

**REMARKS****Title**

The title of the invention has been amended as suggested by the Examiner “Methods and Computer Software Products for Association of Gene Expression with Genetic Variations”

**Objections to the Specification**

The Examiner has objected to the Specification because it contains embedded hyperlinks and/or other forms of browser-executable code. Applicant has deleted the embedded hyperlinks from page 10 and page 15 of the Specification to address this objection. Applicant respectfully requests that the objections to the Specification to be obviated.

**Claim Objection**

Claim 13 has been objected because it the word “product” in line 1 has been misspelled. Claim 13 has been amended with the correct spelling of the word.

**Rejections under 35 U.S.C. § 112 second paragraph**

Claims 1, 13, 25 and 37 are rejected under 35 U.S.C 112, second paragraph, for allegedly lacking clear antecedent basis for “the genes”. Applicant has amended the Claims to recite “at least one gene”. Therefore, objection of Claims 1, 13, 25 and 37 is obviated.

Claims 1, 13 and 25 are rejected under 35 U.S.C 112, second paragraph, for allegedly lacking clarity and conciseness. Applicant has amended the claims to replace “genetic variations” with “genotype”. Therefore, this claim objection is obviated.

Rejection under 35 U.S.C. § 103(a)

Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroes et al. (P/N 6,194,158).

Applicant respectfully disagrees with the Examiner. Kroes et al. discusses a method for measuring expression levels of specific sequences within a cancer cell to determine whether expression is up- or down- regulated by hybridizing mRNA isolated from a normal non cancer cell and mRNA isolated from a cancer cell. The Examiner points out that Kroes et al. discusses SNP screening of a nucleic acids that found to be over or under expressed in a cancer cell (Column 9, lines 5-10). Therefore, in Kroes et al., a cancer cell is identified and a gene that is over or under expressed in the cancer cell is identified. The gene is then screened for SNPs and the resulting SNPs are suggested to be used for cancer diagnostics (Column 9, line 5-48). In contrast, the amended claims recite selecting individuals with different genotypes and identifying a gene whose expression segregate with the genotypes. Applicant respectfully submits that Kroes et al. does not suggest or teach selecting individuals with different genotypes and identifying a gene whose expression segregate with the genotypes. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the present rejection.

Claims 13, 14, 16-21, 25, 26, 28-33, 37, 38, and 40-45 are rejected under 35 U.S.C. (a) as being unpatentable over Kroes et al. taken in view of *In re Venner*. As discussed above, Kroes et al. fails to teach or suggest a method of correlating gene expression with genotype by comparing a first plurality of gene expression profiles from a plurality of individuals with a first genotype and a second plurality of gene expression profiles from a plurality of individuals with a second genotype and identifying the genes whose expression segregate with the genotypes as the genes affected by the genotypes. Accordingly, Applicant respectfully requests withdrawal of the present rejection.

In summary, Applicant respectfully submits that Kroes et al. either singly or in combination with *In re Venner* fails to teach or suggest the present invention, and that the current invention is novel and non-obvious in view of the prior art references. Applicant respectfully requests reconsideration and withdrawal of the present rejections.

CONCLUSION

For these reasons, Applicant believes the application is now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned agent.

Respectfully submitted,

  
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Leticia R. Block Reg. 50,167

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